



**Public Works and Transportation Committee
Electronic Meeting**

**Anderson Room, City Hall
6911 No. 3 Road**

**Wednesday, December 18, 2024
4:00 p.m.**

Pg. # ITEM

MINUTES

PWT-4 *Motion to adopt the **minutes** of the meeting of the Public Works and Transportation Committee held on November 20, 2024.*



NEXT COMMITTEE MEETING DATE

January 22, 2025, (tentative date) at 4:00 p.m. in the Anderson Room.

AGENDA ADDITIONS AND DELETIONS

DELEGATIONS

PWT-9 1. Nathan Davidowicz to speak on Capstan Station and **audit of Canada Line stations**.

ENGINEERING AND PUBLIC WORKS DIVISION

- 2. **TRANSPORTATION DEMAND MANAGEMENT (TDM) RESERVE FUND ESTABLISHMENT**
(File Ref. No. 10-6500-00) (REDMS No. 7836018)

PWT-25

See Page PWT-25 for full report

Designated Speaker: Sonali Hingorani

STAFF RECOMMENDATION

- (1) *That the Transportation Demand Management Reserve Fund Establishment Bylaw No.10563 as described in the staff report titled “Transportation Demand Management (TDM) Reserve Fund Establishment” dated November 19, 2024, from the Director, Transportation be introduced and given first, second and third readings; and*
- (2) *That Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10616 to include the provision of a Transportation Demand Management Reserve Fund, be introduced and given first reading.*



- 3. **TRANSLINK 2025 COST-SHARE FUNDING APPLICATIONS – TRANSPORTATION PROJECTS**
(File Ref. No. 10-6500-01) (REDMS No. 7831660)

PWT-33

See Page PWT-33 for full report

Designated Speaker: Sonali Hingorani

STAFF RECOMMENDATION

- (1) *That the submission of road, pedestrian and bicycle improvement projects as part of the TransLink 2025 Cost-Share Programs, as described in the report titled “TransLink 2025 Cost-Share Funding Applications – Transportation Projects”, dated November 18, 2024, from the Director, Transportation be endorsed;*
- (2) *That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the successful funding agreements; and*

- (3) *Should the grant applications be successful, the budget of the capital projects will be increased to reflect the external contributions and will be included in a Consolidated 5Year Financial Plan accordingly.*

4. **8205Q - AWARD OF CONTRACT FOR FIVE ELECTRIC ICE RESURFACERS**

(File Ref. No. 02-0780-01) (REDMS No. 7570819)

PWT-40

See Page PWT-40 for full report

Designated Speaker: Owen Sinclair

STAFF RECOMMENDATION

- (1) *That Contract 8205Q, for the supply and delivery of five electric ice resurfacers be awarded to Engo Equipment Sales Ltd. for a total cost of \$971,000 excluding taxes as described in the staff report entitled “8205Q – Award of Contract for Five Electric Ice Resurfacers” dated November 7, 2024, from the Director, Public Works Operations;*
- (2) *That staff be authorized to issue change orders as required up to an additional \$50,000 for contingency, for a maximum total value of \$1,021,000, excluding taxes; and*
- (3) *That the Chief Administrative Officer and the General Manager, Finance and Corporate Services be authorized to execute the contracts and all related documentation with Engo Equipment Sales Ltd.*

5. **MANAGER’S REPORT**

ADJOURNMENT



Public Works and Transportation Committee

Date: Wednesday, November 20, 2024

Place: Anderson Room
Richmond City Hall

Present: Councillor Michael Wolfe, Acting Chair
Councillor Carol Day (by teleconference)
Councillor Chak Au
Councillor Kash Heed
Councillor Alexa Loo

Also Present: Councillor Andy Hobbs

Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Public Works and Transportation Committee held on October 16, 2024, be adopted as circulated.

CARRIED

AGENDA ADDITIONS AND DELETIONS

It was moved and seconded

That Speed Limit for No. 3 Road Between Westminster Highway and Granville Avenue be added to the agenda as Item No. 4A.

CARRIED

Public Works & Transportation Committee
Wednesday, November 20, 2024

ENGINEERING AND PUBLIC WORKS DIVISION

1. APPLICATION TO 2024/25 BC ACTIVE TRANSPORTATION INFRASTRUCTURE GRANT PROGRAM

(File Ref. No. 10-6500-01) (REDMS No. 7835948)

It was moved and seconded

- (1) *That the submission for cost-sharing to the 2024/25 BC Active Transportation Infrastructure Grant Program as described in the staff report titled “Application to 2024/25 BC Active Transportation Infrastructure Grant Program” dated October 21, 2024, from the Director, Transportation be endorsed;*
- (2) *That, should the above application be successful, the Chief Administrative Officer and the General Manager, Engineering and Public Works, be authorized on behalf of the City to execute the funding agreement; and*
- (3) *That, should the grant application be successful, the grant amount will be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.*

The question on the motion was not called as discussion ensued with respect to re-purposing of the westbound merge lane on Westminster Highway between No. 2 Road and Lynas Lane.

In response to queries from the Committee, staff advised (i) the project is proposing to reallocate the third merge lane that no longer is required once the channelized right turn is removed and converting that into a bi-directional bikeway, (ii) the protection barrier will be continuous along the bike lane, (iii) the existing channelized lane that allows for free flow movement coming off the No. 2 Road bridge to Westminster Highway will be replaced with a 90 degree right turn for motorists, (iv) there may be recreational cyclists that prefer to take an alternate route, but data received shows a strong desire line to connect to the Railway Greenway in Steveston and provide a connection that’s more direct for the faster cyclists out to Sea Island, (v) in the interim, with the implementation of the cycling facility, there will be connection through the Lynas neighbourhood bikeway to McCallan Rd., and in the longer term, staff are working with the Works Yard project to facilitate the extension along Westminster Hwy. to McCallan Rd., and (vi) current and projected transportation numbers imply the intersection is able to accommodate traffic once the right hand turn lane is taken away.

The question on the motion was then called and it was **CARRIED**.

2.

Public Works & Transportation Committee
Wednesday, November 20, 2024

2. **PROPOSED 2025 PAVING PROGRAM**

(File Ref. No. 10-6000-01) (REDMS No. 7791760)

It was moved and seconded

That the staff report titled, "Proposed 2025 Paving Program," dated October 23, 2024, from the Director, Engineering be received for information.

CARRIED

3. **UPDATE ON 2024/2025 SNOW AND ICE RESPONSE PREPARATIONS**

(File Ref. No. 10-6000-00) (REDMS No. 7772103)

Staff noted an La Niña weather pattern is anticipated for the 2024/25 winter season which may result in experiencing a longer winter season overall.

Public access to the City's GPS technology, available for viewing various road conditions/routes throughout the city (time delay of approx. 15 minutes), was highlighted.

Evan Dunfee, Richmond resident, spoke in support the City's GPS system coming online for the public, and to ask for an update regarding smaller snowploughs capable of clearing some of the delineated bike lanes as well as the downtown pedestrian crosswalks.

In response to the delegation, staff reported there will be link available for residents to view the priority routes and location of snowploughs as they are working during snow events clearing roadways and City facilities, as well as the ability to select traffic and intersection cameras so that residents and motorists can plan their route throughout the city.

In response to queries from Committee, staff noted (i) during storm events additional staff are brought on to clear bus stops and wheelchair let-downs at which time they are also clearing catch basins in advance of the warming weather and melting snow and these efforts continue as the weather warms, however, as priority is the roadway often the snow piles up from the ploughs that pile the snow, but every effort is made to shift to drainage mode as soon as the weather warms up and the snow stops falling, then staff can address any critical water pooling areas calls received, and (ii) a pilot for snow and ice service on pathways and greenways determined it could not be in the service level at this time as all resources currently are needed to focus on first priorities.

It was moved and seconded

That the staff report titled "Update on 2024/2025 Snow and Ice Response Preparations," dated October 23, 2024, from the Director of Public Works Operations, be received for information.

CARRIED

3.

Public Works & Transportation Committee
Wednesday, November 20, 2024

4. **PUBLIC ELECTRIC VEHICLE CHARGING NETWORK – DIRECT CURRENT FAST CHARGING EXPANSION**

(File Ref. No. 10-6125-01) (REDMS No. 7738808)

In response to a query from the Committee, staff noted the City’s EV charging fees at City facilities are in line with fees charged in other municipalities, which is evaluated regularly.

It was moved and seconded

- (1) *That the report titled “Public Electric Vehicle Charging Network – Direct Current Fast Charging Expansion”, from the Director, Climate & Environment and Director, Public Works Operations, dated October 24, 2024, be endorsed, and*
- (2) *That a capital submission for the Electric Vehicle DC Fast Charging Station Installations be submitted for Council’s consideration as part of the 2025 budget process.*

CARRIED

4A. **SPEED LIMIT FOR NO. 3 ROAD BETWEEN WESTMINSTER HIGHWAY AND GRANVILLE AVENUE**

(File Ref. No.) (REDMS No.)

Councillor Heed provided the rationale to consider reducing the speed limit on No. 3 Road between Westminster Highway and Granville Avenue from 50 km/h to 30 km/h as a preventative view to ensuring pedestrian safety. As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That staff undergo a traffic study to consider a reduction in the motor vehicle speed limit from 50 km/h to 30 km/h on No. 3 Road between Westminster Highway and Granville Avenue.

CARRIED

Opposed: Cllr. Loo

5. **MANAGER’S REPORT**

Update: Steveston Area Speed Limit

Staff provided an update regarding the lowering of speed limits in the Steveston neighbourhood from 50 km/h to 30 km/h, noting that the associated signage has now been implemented to reinforce the new speed limit and since the signage has gone up staff have received significant positive feedback from residents, citing appreciation for the City and that they feel safer walking and cycling in their neighbourhood. It was noted that no negative correspondence has been received.

4.

Public Works & Transportation Committee
Wednesday, November 20, 2024

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4:40 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, November 20, 2024.

Councillor Carol Day
Chair

Lorraine Anderson
Legislative Services Associate

A walking audit of all Canada Line stations, by Nathan Davidowicz

Posted on December 3, 2024 by urbanizta

Preamble: *This walking audit of TransLink's Canada Line was done by long-time transit advocate Nathan Davidowicz. He also compiles the Weekly Alternative Buzzer, which we post every Sunday on CityHallWatch. This audit gives a good snapshot at a point in time of the status of accessibility in each station, and could be good material for transit riders, planners, and even TransLink staff, to advocate for improvements. It also provides a time stamp for comparison in the future. Readers will agree that Nathan is one in a million for his dedication to the cause of good public transportation.*

Nathan laments that Vision Vancouver under Gregor Robertson abolished the City Council Standing Committee on Transportation, but he is happy to have the opportunity to present his audit to the Richmond Public Works and Transportation Committee (link) on December 18, 2024. Readers and riders can send supporting letters with their own comments to CityClerk@Richmond.ca (link for info).



(As of 3 pm on 3-Dec-2024, this is the initial version. Please check back for revisions/updates, and more station photos to be added.)

[A walking audit of all Canada Line stations \(autumn 2024\), by Nathan Davidowicz](#)

Yes, it's true. I walked all the stairs in fifteen stations of the Canada Line. (I did not include YVR-Airport Station as it is in a massive building, with many levels). Altogether, I counted 2,488 stairs.

Below, first I start with some **general comments, reading material, and background**, then further below, **my audit of all sixteen stations**, conducted in October and November 2024.

With two of the stations currently under renovation/expansion there are many access problems for many passengers. Most areas around the Canada Line Stations have a high walkability index, although stations in south Vancouver and north Richmond have a lower walkability index. Overall the walk score in Vancouver is 80 and in Richmond it is 48. See maps from Metro Vancouver (pages 153 to 169).

- Link: <https://metrovancover.org/boards/RegionalPlanning/RPL-2024-10-04-AGE.pdf>
- Link: <https://sfb.nathanpachal.com/2024/10/metro-vancouver-walkable-map-doesnt.html>

See also the following links:

- Link: <https://atl.sites.olt.ubc.ca/research/walkability-index/metro-vancouver-walkability-index/>
- Link: <https://atl.sites.olt.ubc.ca/research/walkability-index/>
- Link: <https://vancouver.ca/streets-transportation/walking.aspx>
- Link: <https://www.walkscore.com/cities-and-neighborhoods/>

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The transit score for Vancouver in 2019 was 74, and Richmond had a lower transit score, but it is not published yet.

- Link: <https://www.newswire.ca/news-releases/redfin-ranks-the-best-canadian-cities-for-public-transit-in-2019-897916453.html>
- Link: <https://www144.statcan.gc.ca/tdih-cdit/index-eng.htm>

Most of these Canada Line stations do not conform to present B.C. building standards, the ADA standards of 1990, the BC 2021 Accessibility Act, or the Canada 2019 Accessibility Act.

- Links: ADA (<https://www.ada.gov/>), Accessible Canada Act (<https://www.canada.ca/en/employment-social-development/programs/accessible-canada/act-summary.html>), AccessibleBC (<https://www2.gov.bc.ca/gov/content/governments/about-the-bc-government/accessibility/legislation/accessiblebc>)

The number of stairs at each station varies. At some stations, the number of stairs accessing the northbound platform is different from accessing the southbound platform and vice versa. In some stations the number of stairs is the same. The total number of stairs I walked for each station is from street level to the platform level Northbound (NB) and Southbound (SB) and from NB and SB platforms levels back to the street level.

Not counting the YVR station (too many levels), I walked 2,488 stairs at the other 15 stations.

Should TransLink provide extra signs on stairs? Read this article from New York City.

Link: <https://untappedcities.com/2024/10/08/signs-nyc-subway-stairs/>

Observations

- In my audit, the number of elevators for each northbound and southbound platforms is recorded, as well as the total number of elevators. The number of down and up escalators is recorded.
- At some of the Canada Line stations, transit users must navigate up to three different elevators to reach the platforms.
- Many stations do not have a convenient HandyDART bus stop or conventional bus stop right outside the station.
- Canada Line length is 19.2 km, with 16 stations. It was fifteen years old as of August 2024. Construction took three years and ten months. It has two branches, from Bridgeport Station C1 to Richmond-Brighouse and C2 to YVR-Airport

A brief History

There were many problems during the planning and construction of this rapid transit line.

Originally it was proposed in a 1971 Greater Vancouver Regional District (GVRD) report to replace the Interurban service rail from Vancouver to Richmond that closed in 1958. Then shortly after the 1986 Expo Line was opened, it was proposed again and public meetings were held. However most politicians wanted to build a rapid transit line to Coquitlam ahead of Richmond/YVR. In the early 2000s it was again proposed as Vancouver was awarded the 2010 Winter Olympics. A BC judge finally approved this project in June 2005.

Some of the relevant reports from over the years currently have online links and some media reports do not. Here are some links:

- “Canada Line is a model example of a poorly-designed, under-built toy train”
Link: <https://dailyhive.com/vancouver/canada-line-skytrain>
- Link: https://cptdb.ca/wiki/index.php/SkyTrain_Canada_Line
- Link: https://en.m.wikipedia.org/wiki/Canada_Line

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- Link: <https://www.lexpert.ca/archive/bc-supreme-court-permits-17b-rapid-transit-project-to-proceed/348746>
- Link: <https://dailyhive.com/vancouver/george-massey-tunnel-bridge-replacement-skytrain-option>
- Link: <https://www.railexpress.com.au/more-than-just-a-building/>
- CUPE on P3 construction and all the problems:
Link: https://cupe.ca/sites/cupe/files/p3_canada_line_long_e.pdf (16 pages)

Station ranking elsewhere

Many cities have had their stations ranked in the past. CBC's Justin McElroy did that for all 53 rapid transit stations in 2023, but he did not have a separate ranking for each of the three different lines:

Link: <https://justinmcelroy.substack.com/p/ranking-every-skytrain-station>

Montreal ranked its top five and ten stations:

- Link: <https://cultmtl.com/2024/10/best-metro-stations-in-montreal-best-of-mtl-subway-station-stations-lionel-groulx-mont-royal-berri-uqam-place-des-arts-vendome/>
- Link: https://www.yelp.ca/search?cflt=metrostations&find_loc=Montreal%2C+QC

Toronto ranked the top ten and the best and the worst stations:

- Link: https://www.reddit.com/r/TTC/comments/14pz6o3/whats_your_favourite_ttc_station/
- Link: <https://www.blogto.com/slideshows/best-ttc-stations-toronto/>
- Link: https://www.yelp.ca/search?find_desc=Train+Stations&find_loc=Toronto%2C+ON
- Best and WORST of Toronto Subway:
Link: https://www.youtube.com/watch?v=lizABOMAx_M 13,7 mins

Overall Metro Vancouver stations and especially the Canada Line stations are way inferior to stations in Montreal, Ottawa, and Toronto.

Now focusing on the Canada Line....

Here are some of the problems with the Canada Line stations (observations by Nathan Davidowicz)

- Passengers accessing and using these stations have various problems that should have been fixed years ago.
- To promote use, transit has to be seen as comfortable and convenient for regular users and visitors.
- The biggest problem is access to the stations, as 11 of the 16 stations have only one entrance and two exits.
- The City of Vancouver (as well as Burnaby, New Westminster, Coquitlam, Port Moody, Richmond, Surrey) has failed us by approving new buildings since 1980 without requiring them to connect aboveground or underground to the adjacent stations.
- Many of the existing emergency exits could be converted to second entrances.
- Ideally all stations should have three or four entrances from all directions.

Capstan Station

A new infill station (Capstan) has been under construction since Sept. 2, 2021. It was scheduled to open in 2023, but as of Nov 2024 the TransLink website (<https://www.translink.ca/capstan>) says the following under frequently asked questions: *Question: When do you expect the Capstan Station will be open? Answer: The station is projected to open in the coming months.*

Link: <https://www.richmond-news.com/local-news/richmonds-capstan-station-in-final-stages-of-construction-translink-9775021>

So Capstan Station will open sometime in 2025. **You read it first here on CityHallWatch.** Total construction time would be a bit less than the three years and ten months it took to build the whole line and the 16 stations. The main reason for the delay is that TransLink itself is building this station, while all other stations were built by SNC-Lavalin (its new name since Sept. 2023 is AtkinsRéalis). TransLink does not have any experience in building stations. Cyclist advocate group HUB Richmond and many cyclists are very upset that there is no bike parkade (only lockers), and blame Richmond's inexperienced transportation staff who signed the construction contract with TransLink.

Secrecy

This brings back the issue of secrecy around public infrastructure. See this good article from Auckland NZ. Link: <https://www.greatauckland.org.nz/2024/10/14/who-benefits-from-secrecy-around-public-infrastructure/>

New stations on Canada Line?

In Vancouver, new stations were previously proposed for Cambie Street and 33rd Avenue and 57th Avenue. I would have added one at Cambie and 16th Avenue.

Link: <https://dailyhive.com/vancouver/four-stations-could-be-added-to-skytrain-canada-line>

The cost of these three new stations as well as various upgrades to the existing Canada Line (like longer platforms and more entrances) is estimated at \$2 billion. Shockingly, that is the original cost of building the existing Canada Line.

Vancouver City Council has failed us by not copying Richmond's commitment to build more stations, as in Capstan Station. The City of Vancouver does not currently have a pro-transit mayor (Ken Sim). The last truly pro-transit mayor was Mike Harcourt (https://en.wikipedia.org/wiki/Mike_Harcourt).

Hours of service (span) on all connecting buses

These should be the same or better than the Canada Line span of 20/7 (20 hours a day every day of the week, 365 days a year). Minor changes to early morning opening/closing of the stations and minor changes to early morning bus services would result in 24/7 bus/train service on many corridors. Vancouver has the least number of overnight 24/7 bus services compared to Montreal and Toronto.

Platform design

- We need **two elevators per platform**, which is the standard in most other locations.
- **Centre-island platforms are better than split platforms.**
See https://en.wikipedia.org/wiki/Railway_platform.
- **Elevators should be larger to accommodate large wheelchairs, bikes, strollers.**
- Here is a good example of a new Station in Washington DC that has 10 elevators!!
Link: <https://www.youtube.com/watch?v=MWQVNmsXHTw> 22.6 mins
- We also need **longer platforms to accommodate longer trains.** The present platforms are only 40 to 50 m long, instead of 80 to 90 m long. The present length of two-section Canada Line trains is 41 m.

Information provision (including maps)

- **All available information should be posted on websites and at different stations.**
- A **video showing details** could also be used.
- **Photos and written descriptions** could also be used for **wayfinding and to help riders navigate how to enter and exit** the different stations.
- **Detailed up to date maps should be posted at Stations entrances/exits, platforms and bus loops/bus stops** adjacent to the stations. The present standard maps have many omissions and need improvements.

- Some maps are marked at the bottom as “Not To Scale” (which may reduce map usefulness).
- YVR has detailed maps of the terminal and Canada Line Station.
Link: <https://www.yvr.ca/en/passengers/navigate-yvr/terminal-maps>
- On Canada Line, TransLink provides very little information, without any maps of individual stations.
Link: <https://thecanadaline.com/>
Link: <https://thecanadaline.com/station-guides/>
- **When stations are closed overnight proper information about available overnight bus services should be posted.**

Seating

Extra seating is needed. At present there are only just two, three, or four seats per platform. It would be reasonable to have at least six to ten seats per platform. More seats on outbound platforms, as people wait longer times for their Branch Train C1 or C2. Note that at night, the train frequency is set at up to 20 minutes apart (whereas it is only 12 minutes apart on the Expo Line two branches). In New York City, they have extra seating with a time limit!

Link: <https://www.amny.com/transit/grand-central-madison-mta-seating/>



Above: An example of only two seats on the entire platform. This photo is at Templeton Station.

Bus stops around stations

All bus stops around all stations should be accessible, and proper concrete/asphalt walkways and bikeways should be provided.

Bus shelters

We need proper, large size bus shelters.

Bike parkades and maps

Proper bike parkades (and lockers if needed) should be provided at all stations, not just few. On Canada Line there are only two bike parkades and just five stations have bike lockers. Most bike lockers are not wide enough to accommodate large cargo bikes or longer bikes. Proper up to date Bike Maps should be posted everywhere.

Public washrooms

Public washrooms should be provided. There are often no adjacent public washrooms, so riders are forced out of the TransLink services to find a hospitable store or restaurant, which are not obliged to provide a non-customer with access to a washroom. At every given time, roughly 20-30% of the public have some kind of irritable bowel syndrome, whether it be diarrhea or constipation. This affects the old and the young alike. Mothers with babies and young children need access to a washroom. Seniors traveling long distances on TransLink need access to a washroom. Disabled people need an accessible washroom. Where there are no adjacent public buildings/stores/restaurants, proper signs should be installed at every station/bus loop directing passengers to available washrooms.

Weather protection

All above ground stations should be enclosed to stop snow/rain/wind from getting inside and for passenger comfort.

Limited expertise on design

Most architects do not use transit in Metro Vancouver, which is why our stations are so bad compared to many other big cities in Canada.

Housing

We need to build 100% affordable rentals around most stations. This was only started in 2024, by the BC Ministry of Housing and Ministry of Transportation.

Crowding

Many passengers complain about overcrowded trains during rush hours. Extra 24 trains (or 12 two-car trains) were ordered from South Korea's Hyundai Rotem and delivered in 2019/20. However they were taken out during COVID and have not returned back. (i.e., they are now empty trains in the garage, not being used).

- Link: <https://buzzer.translink.ca/2020/01/new-canada-line-trains-increase-service-for-customers/>
- Link: <https://dailyhive.com/vancouver/canada-line-skytrain-new-trains-in-service>
- Link: <https://dailyhive.com/vancouver/canada-line-peak-hour-service-new-trains>
- Link: <https://dailyhive.com/vancouver/canada-line-skytrain-new-trains-in-service>

Access to outlets for charging

There are no convenient power outlets to charge e-bikes and scooters as well as cell phones, tablets, and laptop computers.

Penny wise, pound foolish

In order to save money the Canada Line stations were built very differently from the original Expo Line stations between Vancouver and New Westminster. This is very unfortunate. **It will take many years and lots**

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of money to correct the various deficiencies. At present there is no funding or even a proper plan to do that.

Here is a list of recent YouTube videos on the Canada Line.

- Capstan SkyTrain Station Construction: The Final Stages – Fall 2024
Link: <https://www.youtube.com/watch?v=YGqzMMLHXUQ> 6.1 mins
- 9/8/2024 Canada Line: CAPSTAN STATION, Richmond, BC
Link: <https://www.youtube.com/watch?v=B-7od-EGzjE> 4.3 mins
- Canada Line Full Ride (Brighouse to Waterfront)
Link: <https://www.youtube.com/watch?v=IFrzjuGfBJs> 23.5 mins
- Vancouver Skytrain Canada Line Waterfront to Richmond-Brighouse
Link: <https://www.youtube.com/watch?v=jUaQCfbdCf4> 20.1 mins
- Canada Line Ride (Waterfront to YVR)
Link: https://www.youtube.com/watch?v=E_6N6SIB2CU 26.4 mins
- Complete Real Time Canada Line Ride – YVR-Airport to Waterfront
Link: https://www.youtube.com/watch?v=_qlcASMN9RU 27.3 mins
- Four Future Infill Stations on the Canada Line
Link: <https://www.youtube.com/watch?v=nHqk449RF7w> 7.3 mins
- The Canada Line is actually a GREAT transit line?! | Opinions
Link: <https://www.youtube.com/watch?v=DmCvNaDc3M8&t=3s> 11.8 mins

Walking audit of all Canada Line stations (autumn 2024, by Nathan Davidowicz)

And now, what you have been waiting for, here is the audit list of all existing 16 stations on the Canada Line – from terminus to terminus (Vancouver to Richmond).



Waterfront Station

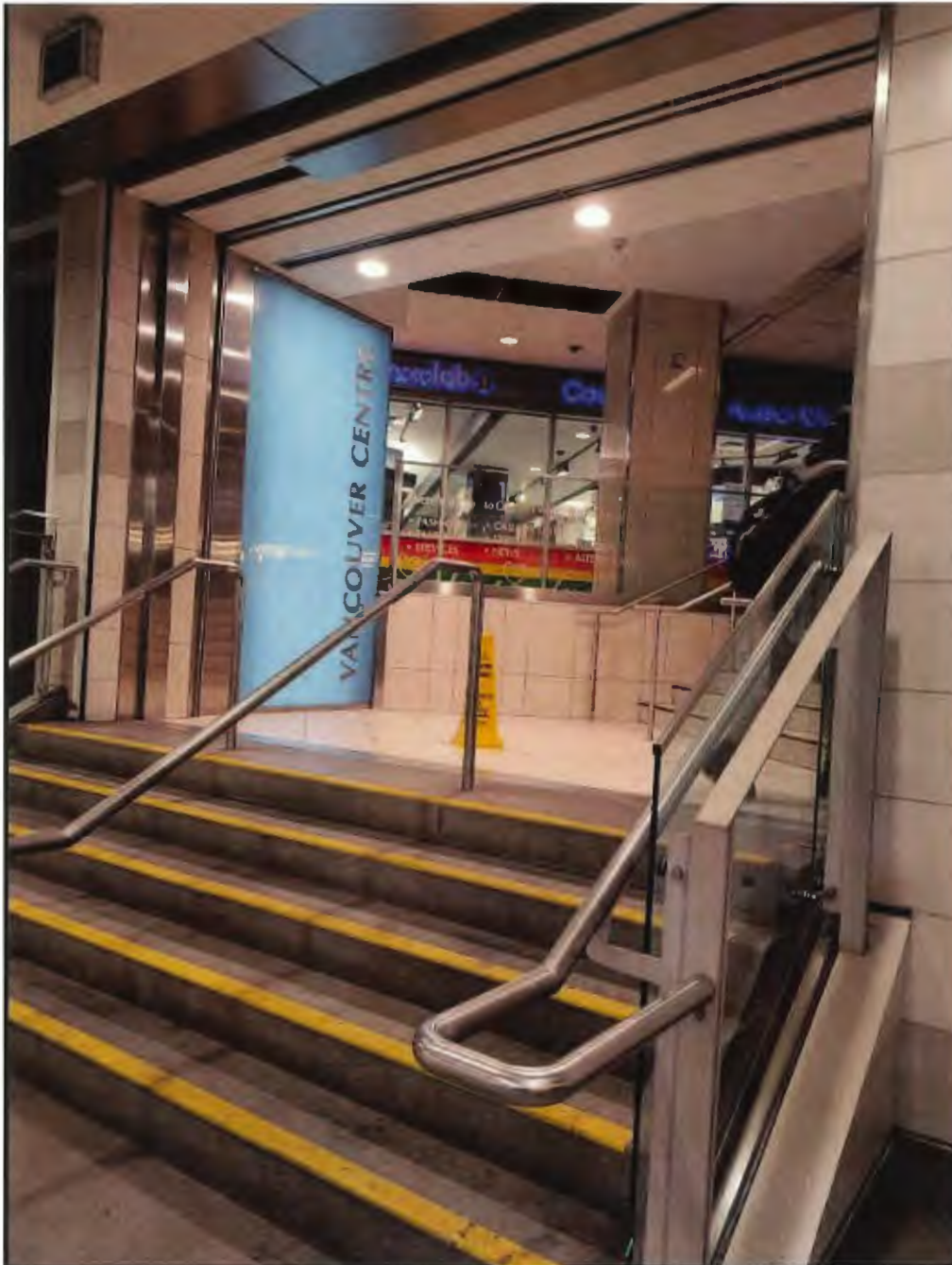
For Waterfront Station, the HandyDART bus stop is in the lane on the east side of Granville Mall.

Waterfront Station

- 42 stairs from street to concourse, 24 stairs from concourse to platforms. Total number of stairs walked 132
- Two elevators to get to the platform. Total 2 elevators
- Two up escalators. Total 2 escalators
- No Bike parkade or lockers.
- One entrance. But together with the bigger Waterfront Station there are 4 entrances.
- Centre island platforms

Additional comments:

- This station is part of the bigger Waterfront Station for the Expo Line, West Coast Express and SeaBus. However as the bigger Waterfront Station is privately owned there are many problems that can not be fixed until the B.C. government buys the bigger Waterfront Station and redevelops the station. Waterfront Station is the only SkyTrain station not owned by the BC government.
- HandyDART bus stop is hidden in a lane off Granville Mall
- No bus stops outside: The closest southbound (SB) bus stop is on Granville Mall nearside Dunsmuir Street and the closest northbound (NB) bus stop is on Granville Mall nearside Pender Street.
- Need to reroute buses to/from North Vancouver Nos 209, 210, 211, 214 to stop at Waterfront Station



Above: Vancouver – City Centre Station. Hidden entrance to transfer from Canada Line to Expo Line via London Drugs. There are stairs but no escalator or elevator. This entrance only open limited hours.

Vancouver City Centre Station

- 42 stairs from Concourse to platform two staircases.
- From street to concourse it is 40 stairs.
- Total number of stairs walked 164.
- Two elevators to get to both platforms. Total two elevators.
- One down escalator and three up escalators. Total four escalators.
- No bike parkade or lockers.
- No HandyDART bus stop.
- One main entrance, two minor entrances to Pacific Centre Mall and Robson St. and one via London Drugs to the east side of Granville Mall.
- Centre island platforms.

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Additional comments:

- This station together with the adjacent Granville station handles **more passengers than any other station.**
- Need proper wayfinding to help passengers walk between the two stations and/or additional underground connection that is open all hours. (There is a minor connection via London Drugs that is open for limited hours and is not accessible as there are stairs, therefore I do not count this as a proper entrance.)
- Need to convert the emergency exit on Granville and Robson to a proper second entrance as it is unlikely a new station will be built in the 1000 block of Granville Mall.
- Bike valet is available but only during the summer.
- Need the proposed bus No. 11 "Nelson" to start/finish here. This bus route was promised as far back as 1971 connecting Stanley Park, West End and Downtown.

Yaletown-Roundhouse Station

- **41 stairs concourse to platform, concourse to street 57 stairs.**
- **Total number of stairs walked 196.**
- **Two elevators to get to both platforms. Total two elevators.**
- **One down and two up escalators. Total three escalators.**
- **No bike parkade or lockers.**
- **One entrance, needs more entrances.**
- **Centre island platforms.**

Additional comments:

- Need proper directions to transfer to/from bus No. 23 on Pacific Boulevard. or reroute No. 23 to stop on Davie Street instead of Pacific Boulevard.

Olympic Village Station

- **30 stairs from street to concourse. 28 stairs from concourse to platform. Total number of stairs walked 116.**
- **Two elevators to get to both platforms. Total two elevators.**
- **Two up escalators. Total two escalators.**
- **No bike parkade or lockers.**
- **No HandyDART bus stop.**
- **Only one entrance, needs more entrances.**
- **Centre island platforms.**

Additional comments:

- Need proper bus service (as an extension of No. 50) to Main St.-Science World Station.
- Return of the 2010 Olympic streetcar should be implemented

Broadway – City Hall Station

- **23 stairs to both platforms. Total number of stairs walked 92.**
- **One elevator to both platforms. Total two elevators.**
- **Two up escalators. Total two escalators.**
- **No bike parkade, lockers removed until construction is finished.**
- **No HandyDART bus stop until construction is finished.**
- **Only one entrance, needs more entrances.**
- **Split platforms.**

Additional comments:

- Need proper underground connection to BC Cancer Foundation and VGH.
- New City Hall will be built just east of the station by mid 2030s and will include a bike parkade and washrooms.
- Need proper Super Express (non-stop bus service) westbound to UBC and eastbound to Commercial-Broadway Station, Rupert Station as well as Brentwood Station in Burnaby.

King Edward Station

- **36 stairs from street to concourse and northbound platform.**
- **27 stairs from concourse to southbound platform**
- **Total number of stairs walked 198**
- **One elevator to get to the northbound platform.**
- **Two elevators to get to the southbound platform. Total two elevators.**
- **Two up escalators. Total two escalators.**
- **Bike parkade, no bike lockers.**
- **HandyDART bus stop hidden in the back lane.**
- **One entrance, needs more entrances.**
- **Side platforms on two levels.**

Additional comments:

- King Edward Station is the only station with two levels, Level 1 for travelling northbound and level 2 for travelling southbound
- Ideally we should have one elevator to serve both platforms like at Burrard Station, but at King Edward you have to take 2 elevators to access level 2
- No proper bus shelter. at the westbound bus stop outside the station.
- Need the southbound Cambie St. bus stop to be located outside the Station instead of on Cambie St south of King Edward.
- Need proper bus stop on King Edward Avenue for the FREE shuttle bus to/from Women's and Children's Hospitals.
- Need express buses on bus route No. 25



Above: Oakridge-41st Station: This busy station has only one entrance and only one up escalator and no down escalator as well as stairs.

Oakridge-41st Station

- 43 stairs from Street to concourse and southbound platform, 30 from concourse to lower concourse level 33 from lower concourse level to northbound platform.
- Total number of stairs walked 198.
- One elevator for southbound platform, three elevators for northbound platform Total three elevators.
- Three up escalators. Total three escalators.
- No HandyDART bus stop until construction is finished.
- No bike parkade, lockers removed till construction is finished.
- One entrance, needs more entrances.
- Split platforms

Additional comments:

- Because of construction of the new Oakridge Park (14 towers) as well as other towers the City has failed us by not having a proper construction management agreement, as a result bus passengers have many problems accessing the bus stops on Cambie St. and on 41st Avenue. These problems started in 2020 and will not be resolved for a few more years.
- For more information see CHW <https://cityhallwatch.wordpress.com/2024/09/25/oakridge-cambie-41st-a-mess-for-transit-users-pedestrians/>
- Need Super Express buses (non-stop) westbound to UBC and eastbound to Joyce-Collingwood Station.
- R4 Rapid bus to be extended east into Burnaby to serve Burnaby Hospital, BCIT and Brentwood Station.

Langara-49th Station

- **28 stairs from street to concourse and northbound platform, 32 stairs to lower level and 32 stairs from lower concourse level to southbound platform.**
- **Total number of stairs walked 240.**
- **One elevator for northbound platform three elevators to southbound platform. Total three elevators.**
- **Three up escalators. Total three escalators.**
- **Bike lockers but no bike parkade.**
- **One entrance, needs more entrances.**
- **Split platforms.**

Additional comments:

- No proper bus shelters at the two bus stops outside the station.
- Need Express bus service on No. 49

Marine Drive Station

- **44 from platform to concourse, concourse to street 26.**
- **Total number of stairs walked 280.**
- **One elevator from concourse for both northbound and southbound platforms, one from concourse to street (bus loop) total three elevators.**
- **Three up escalators. Total three escalators.**
- **No bike parkade but yes to lockers.**
- **One main entrance, minor entrance to Marine Gateway Mall, needs more entrances.**
- **Split platforms.**

Additional comments:

- Needs proper above ground connections to the west side of Cambie Street, north side of Marine Drive and to the south.
- Need to build affordable rentals above the bus loop.
- Need new bus stops on the south side of Marine Drive (between Cambie and Yukon Streets)
- Need to change routing of buses No. 3, 100, N8, N20 to be via northbound Cambie Street and eastbound on Marine Drive.
- Need a combined bus/bike only lane on Cambie Street and on Marine Drive.
- Need Express bus service on No. 100 (replacing No. 80) between Marine Drive Station and 22nd Street Station in New Westminster.
- Need to extend/revise bus No. 100 to operate both ways on Hudson St. as well as start/finish at 63rd Avenue bus loop (at Granville).

Bridgeport Station

- **Two staircases from platforms to concourse 38 stairs each.**
- **34 stairs from concourse to street (bus loop) level.**
- **Total number of stairs walked 144.**
- **One elevator to concourse, one elevator from concourse to platforms. Total two elevators.**
- **Two up escalators. Total two escalators.**
- **The only station that has both a bike parkade and a bike lockers.**
- **One main entrance, minor entrance to River Rock Casino Resort Hotel.**
- **Centre island platforms.**

Aberdeen Station (Cambie Road)

- **45 stairs to both northbound and southbound platforms.**
- **Total number of stairs walked 180.**

PWT - 21

- **One elevator to each platform. Total two elevators.**
- **One up escalators to each platform. Total two escalators.**
- **No bike parkade but yes to lockers.**
- **One main entrance, a minor entrance to Aberdeen Square Mall, needs more entrances.**
- **Split platform.**

Additional comments:

- This station should be renamed Aberdeen-Cambie Road as Aberdeen Square is the name of the mall.
- This will be consistent with the naming of other stations.

Lansdowne Station (KPU)

- **45 stairs to both northbound and southbound platforms.**
- **Total number of stairs walked 180.**
- **One elevator to each platform.**
- **One up escalators to each platform. Total two escalators.**
- **No bike parkade but yes to lockers.**
- **One entrance, needs more entrances.**
- **Split platforms.**

Additional comments:

- Need a proper cover walkway to KPU.
- Should rename the station Lansdowne-KPU as KPU has been there since 1992 and is unlikely to move.
- Need to reroute bus No. 301 to stop at KPU.

Richmond – Brighthouse Station

- **44 stairs to the single platform.**
- **Total number of stairs walked 88.**
- **One elevator to the platform. Total one elevator.**
- **One up one down escalators. Total two escalators.**
- **No Bike parkade, Bike locker for only six bikes.**
- **One entrance, needs more entrances.**
- **Side platform.**

Additional comments:

- Needs two platforms instead of only one.
- Need to extend the line to a new station at No. 3 Rd and Granville Ave. by Richmond City Hall.
- Need to have bus No. 418 to start/finish at this station. Thus providing another connection from Brighthouse to NW.
- Need a loop/circle routing to No. 414 to connect other stations to the Olympic Oval and provide bus service on River Parkway
- Need a proper Express bus to East Richmond/Hamilton and New Westminster, the present No.410 is a milk run.
- Need an Express bus to Steveston in addition to all the milk run bus routes.

Templeton Station

- **27 stairs from concourse to both platforms**
- **total number of stairs walked 108**
- **One elevator for each platform. Total 2 elevators**

PWT - 22

- **One up escalators to the concourse. Total 4 escalators**
- **No bike parkade, no lockers**
- **Two entrances**
- **Side platforms**

Additional comments:

- Need new bus route (from Steveston) to start/finish at this station.
- At present there is no bus service over the No. 2 Road Bridge!!

Sea Island Centre Station

- **28 stairs from overpass to platforms. Total number of stairs walked 172.**
- **one up and one down escalator and one elevator from concourse level to platform level.**
- **No stairs from concourse to north side(North Service Road) ground level, only one up and one down escalators.**
- **No bike parkade, no lockers.**
- **No HandyDART bus stop.**
- **Two entrances.**
- **Centre island platform.**

YVR Airport Station

- **Two entrances and exits for A) Canada Flights B) Other flights.**
- **Can not have a count here as there are multiple elevators and escalators and various emergency stairs on various levels. See map. <https://www.yvr.ca/en/passengers/navigate-yvr/terminal-maps>**
- **Need moving sidewalks and/or more self driving autonomous robotic pods. The pods were introduced in July 2024 3 years after the UK Heathrow airport see these reports:**
 - Link: <https://www.youtube.com/watch?v=T7ZvX-p3-Ts&t=12s>
 - Link: <https://www.youtube.com/watch?v=qnbTcE4Xdoo&t=42s>
 - Link: <https://www.aandkrobotics.com/>
- **Walking distances are quite far between the station platform and the different levels at YVR which is the biggest building in the province of B.C.**
- **No bike parkade, no lockers.**
- **Side platform.**

Additional comments:

- Needs proper two platforms instead of only one narrow platform for both loading and unloading.
- Needs to build the second airport station that was supposed to be constructed in 2020 but delayed because of COVID.
- Need proper overnight bus service to/from YVR when Canada Line is closed. For 4 hours between 1 am and 5 am there are only 3 trips provided by the N10 bus. This is unacceptable.
- While YVR paid \$300 million toward the construction of the Canada Line they forgot to sign a proper contract with TransLink! Early morning staff have a hard time getting to their jobs.

For Nathan Davidowicz's 2020 review of the 16 stations in Burnaby and New Westminster see this PDF link <https://drive.google.com/file/d/17YMJAAEh6uVoaajajuQDWirZ2m1I8cGk/view?usp=sharing>

Nathan issues a weekly e-newsletter, the *Weekly Alternative Buzzer*. You can find it on CityHallWatch, or write him directly to subscribe, correspond or provide input and tips (nathandavidowicz2@gmail.com).

You can also find his content on these platforms:

- Facebook: "We Ride Public Transit Vancouver"
- X (Twitter): NathanDavidowi1
- Reddit: r/transit r/VictoriaBC
- LinkedIn: Nathan Davidowicz
- Instagram: nathandavidowicz2
- Blue Sky: @nathandavidowicz.bsky.social



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** November 19, 2024
From: Lloyd Bie, P.Eng.
 Director, Transportation **File:** 10-6500-00/Vol 01
Re: **Transportation Demand Management (TDM) Reserve Fund Establishment**

Staff Recommendations

1. That the Transportation Demand Management Reserve Fund Establishment Bylaw No. 10563 as described in the staff report titled "Transportation Demand Management (TDM) Reserve Fund Establishment" dated November 19, 2024, from the Director, Transportation be introduced and given first, second and third readings; and
2. That Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 10616 to include the provision of a Transportation Demand Management Reserve Fund, be introduced and given first reading.

Lloyd Bie, P.Eng.
 Director, Transportation
 (604-276-4131)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Law	<input checked="" type="checkbox"/>	
Building Approvals	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

On April 25, 2024, the BC government passed Bill 16 (Housing Statutes Amendment Act, 2024), which supports the recent legislative changes related to increasing the supply of housing in BC. The new legislation, through amendments to the Local Government Act provides local governments the ability to establish a reserve fund for the purpose of providing cash-in-lieu for Transportation Demand Management (TDM) measures.

This report recommends the establishment of a TDM reserve fund, which is required to hold the developer cash-in-lieu contributions towards TDMs. Amendments to the Zoning Bylaw are also recommended in compliance with Bill 16.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

2.3 Ensure that both built and natural infrastructure supports sustainable development throughout the City.

This report supports Council's Strategic Plan 2022-2026 Focus Area #6 A Vibrant, Resilient and Active Community:

6.1 Advance a variety of program, services, and community amenities to support diverse needs and interests and activate the community.

Analysis

Bill 16: Transportation Demand Management Reserve Fund

Transportation demand management is a set of strategies to reduce traffic and parking demand of a development by encouraging travel by walking, cycling and transit.

Bill 16 provides local governments the ability to establish a reserve fund for the purpose of collecting cash-in-lieu for Transportation Demand Management (TDM) measures where certain criteria are satisfied. The Zoning Bylaw must set out which TDM requirements are eligible for a cash-in-lieu option and specify the associated value of the cash contributions. If the TDM provisions of the Zoning Bylaw give a developer the option to make a cash-in-lieu payment rather than delivering a specific TDM for their development, such payment must be made to the TDM reserve fund.

Funds collected in the TDM reserve fund can be used by the City to support future active transportation programs and infrastructure to promote increased walking and cycling trips in the City. Specifically, the amended Local Government Act identifies the money in the reserve fund, may only be used for the following:

(a) to pay the capital costs of constructing and installing transportation demand management measures in accordance with the bylaw;

(b) to pay principal and interest on a debt incurred by a local government as a result of an expenditure under paragraph (a); and

(c) to pay a person or public authority under a partnering agreement in order to pay capital costs incurred by the person or public authority to construct and install transportation demand management measures in accordance with the bylaw.

Contribution to the fund is payable at the time of the building permit issuance. Funds accrued in the reserve fund will support implementation of active transportation infrastructure, including but not limited to, capital expenses related to enhanced bicycle parking, sidewalks, shared pathways and transit amenities.

Existing Transportation Demand Management Policy

The Zoning Bylaw establishes the conditions for securing TDMs as part of a development. The existing bylaw promotes sustainable growth by securing TDM programs on-site as part of a new development. The implementation of TDMs for new developments are undertaken through two distinct provisions depending on the land use and location:

Transit Oriented Areas (TOAs): The Zoning Bylaw sets out mandatory TDM requirements for all residential developments in a TOA (Attachment 1). Specific TDMs are established for TOAs as requiring on-site parking for residential uses in TOA zones is prohibited in accordance with provincial housing regulations. The TDMs required in TOAs include transit passes, car share parking spaces and bicycle-related amenities. These provisions ensure residents have access to alternate modes of transportation as parking for a personal vehicle may not be available to them.

City Wide: For the majority of developments in the City, the provision of TDM measures is not mandatory. The Zoning Bylaw allows the City to secure TDMs through the development applications process when a parking reduction is being sought. This approach aligns a TDM plan for a development with the level of parking reduction and in consideration of the context of each site.

Proposed Amendments to Richmond Zoning Bylaw

In accordance with Bill 16, amendments to the Richmond Zoning Bylaw are required to establish a TDM reserve fund and enable the cash-in-lieu option for specific TDM measures.

Staff recommend bylaw amendments that permit cash contributions to expand the TDM options for new developments as follows:

Transit Oriented Areas (TOAs) - Transit Passes: Include the provision for a cash contribution equivalent to a minimum provision of a 1-year 2-zone transit pass per dwelling unit. The Zoning Bylaw requirement and assigned monetary value for the provision of transit passes in TOAs meet Bill 16's criteria for TDM cash-in-lieu. The City would not be required to provide the transit passes if the developer opts to provide a cash-in-lieu. The funds collected must be used by the City for the capital costs of active transportation infrastructure. This includes, but is not limited to enhanced bicycle parking, sidewalks, shared pathways, and transit amenities.

City Wide: Establishing a TDM reserve fund will allow any voluntary monetary contributions, towards TDMs secured through a rezoning, that are acceptable to the City, to be deposited into the reserve fund. For example, fulfilling frontage upgrades as part of smaller developments sometimes presents challenges for developers. In such instances, the reserve fund will provide flexibility for the developer to provide a cash-in-lieu for these works. The City will then be able to use the funds in the reserve fund to make active transportation infrastructure improvements city-wide.

Next Steps

Should Council grant first reading to the amendment Zoning Bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment.

Staff will monitor developer interest in a cash-in-lieu option for the provision of transit passes in TOAs and other voluntary cash contributions towards the TDM reserve fund secured through rezoning. Staff are currently reviewing other opportunities to establish mandatory TDMs. In particular, securing TDMs to support Small-Scale Multi Unit Housing (SSMUH) developments would support reducing reliance on personal automobiles by future residents. Additional bylaw amendments to expand the City's TDM program will be brought forward, as required.

Financial Impact

None.

Conclusion

The recommended reserve fund establishment bylaw for the Transportation Demand Management (TDM) Reserve Fund reflects the new provincial Bill 16. The TDM reserve fund will permit developers to select cash-in-lieu contribution towards transportation demand management measures required through the development process in Transit Oriented areas (TOAs). The establishment of the TDM reserve fund will also permit any voluntary monetary contributions towards TDMs that are secured through a rezoning to be deposited in the fund. The reserve fund will broaden the City's TDM policy and support the implementation of walking and cycling related infrastructure.

As required by the Local Government Act (as amended by Bill 16), before June 30 of each year staff will provide an annual update on the status of the Transportation Demand Management (TDM) Reserve Fund.

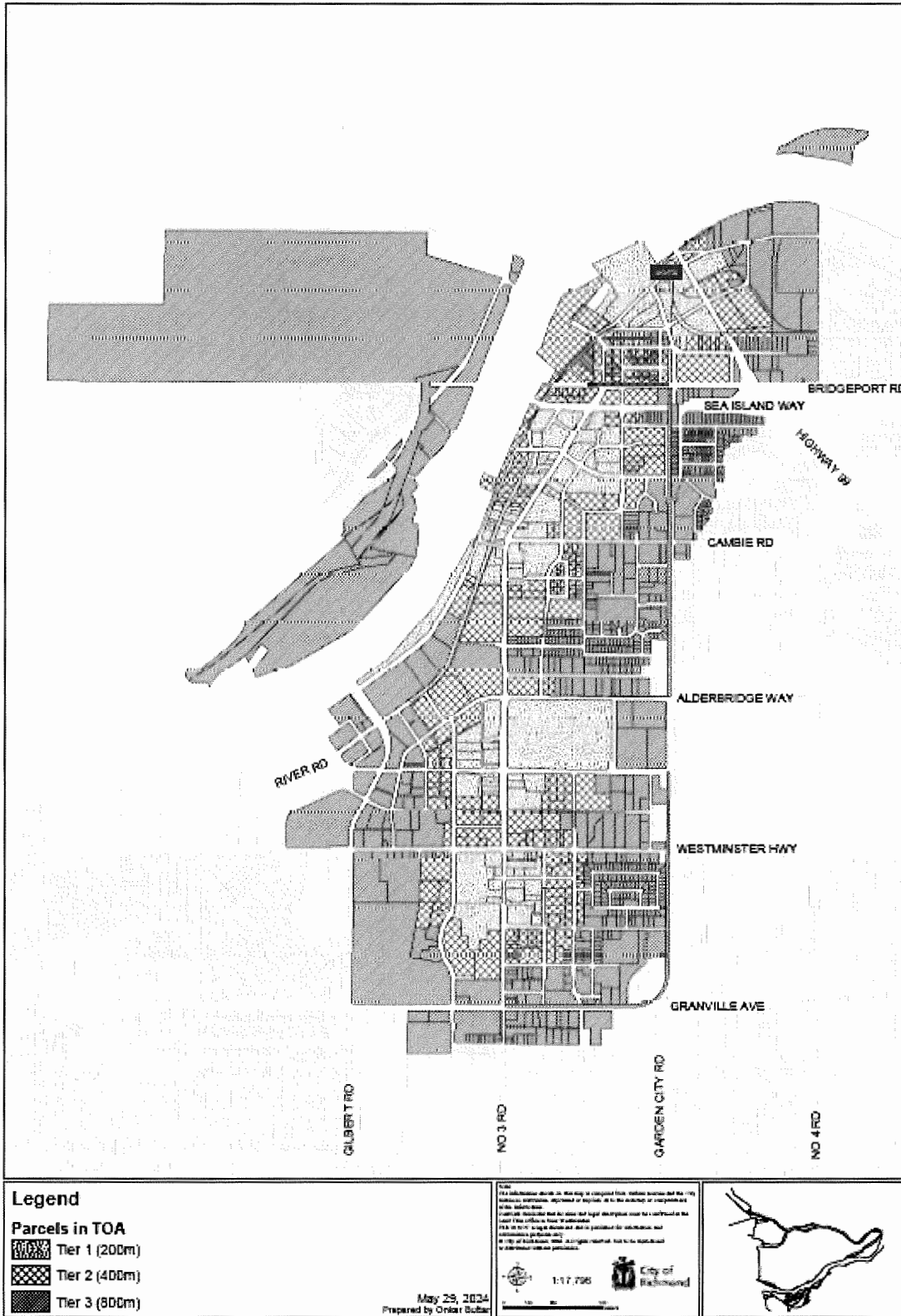


Sonali Hingorani, P.Eng.
Manager, Transportation Planning and New Mobility
(604-276-4049)

SH:sh

Att. 1: Transit-Orientated Areas (TOA) Map

Transit-Orientated Areas (TOA) Map





**Transportation Demand Management Reserve
Fund Establishment Bylaw No. 10563**

WHEREAS:

- A. Section 188(1) of the *Community Charter* authorizes Council to establish a reserve fund for a specified purpose and direct that money be placed to the credit of the reserve fund;
- B. Council wishes to establish a reserve fund for the purposes described in this bylaw;

The Council of the City of Richmond enacts as follows:

1. The Transportation Demand Management Reserve Fund is established.
2. For the purpose of this bylaw:
 - (a) “**City**” means City of Richmond:
 - (b) “**Partnering Agreement**” has the meaning set out in the Community Charter (BC), as may be amended or replaced from time to time:
 - (c) “**Transportation Demand Management Measures**” means projects (including pilot projects), programs, and infrastructure for improving the movement of people and goods, reducing motor vehicle dependence and increasing sustainable transportation through provisions, including but not limited to enhanced bicycle parking, sidewalks, shared pathways, and transit amenities.
3. Any and all amounts in the Transportation Demand Management Reserve Fund, including any interest earned and accrued, may be used:
 - (a) to pay the capital costs of constructing and installing Transportation Demand Management Measures, and any other capital costs that support improving the movement of people and goods, reducing motor vehicle dependence, supporting a safe systems approach and increasing the range of sustainable mobility options;
 - (b) to pay principal and interest on a debt incurred by the City as a result of an expenditure under subsection 3(a) above; and

(c) to pay a person or public authority under a Partnering Agreement in order to pay capital costs incurred by the person or public authority to construct and install Transportation Demand Management Measures.

4. If any section, subsection, paragraph, clause or phrase of this bylaw is for any reason held to be invalid by the decision of a court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this bylaw.
5. This Bylaw is cited as **“Transportation Demand Management Reserve Fund Establishment Bylaw No. 10563”**.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

MAYOR

CORPORATE OFFICER

CITY OF RICHMOND
APPROVED
for content by originating dept.
<i>BS</i>
APPROVED for legality by Solicitor
<i>JA</i>



**Richmond Zoning Bylaw 8500
Amendment Bylaw 10616
(Transportation Demand Management Measures)**

The Council of the City of Richmond enacts as follows:

- (1) Richmond Zoning Bylaw 8500, as amended, is amended to add the following definition to Section 3.4:

“Transportation Demand Management Reserve Fund” means the statutory Capital Reserve Fund created by the Transportation Demand Management Reserve Fund Establishment Bylaw No. 10563.”

- (2) Richmond Zoning Bylaw 8500, as amended, is amended further by replacing Section 7.9A.1(d)(i) in its entirety and replacing with the following:

- i) “Transit Pass Program: provision of a minimum of one 2-zone transit pass per **dwelling unit** for one year, or equivalent cash-in-lieu contribution to the **Transportation Demand Management Reserve Fund** at the time of building permit issuance for the development at the then applicable published Compass card rates;”

- (3) This Bylaw is cited as “**Richmond Zoning Bylaw 8500, Amendment Bylaw 10616**”.

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED

CITY OF RICHMOND
APPROVED
for content by originating dept.
<i>US</i>
APPROVED for legality by Solicitor
<i>JA</i>

MAYOR

CORPORATE OFFICE



To: Public Works and Transportation Committee **Date:** November 18, 2024
From: Lloyd Bie, P.Eng. **File:** 10-6500-01/2024-Vol
Director, Transportation 01
Re: TransLink 2025 Cost-Share Funding Applications – Transportation Projects

Staff Recommendations

1. That the submission of road, pedestrian and bicycle improvement projects as part of the TransLink 2025 Cost-Share Programs, as described in the report titled “TransLink 2025 Cost-Share Funding Applications – Transportation Projects”, dated November 18, 2024, from the Director, Transportation be endorsed;
2. That the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the successful funding agreements; and
3. Should the grant applications be successful, the budget of the capital projects will be increased to reflect the external contributions and will be included in a Consolidated 5 Year Financial Plan accordingly.

Lloyd Bie, P.Eng.
Director, Transportation
(604-276-4131)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Department	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

Each year, municipalities are invited to submit road, pedestrian and bicycle related projects for funding consideration from TransLink's cost-share funding programs. This staff report presents the applications from the City to TransLink's 2025 transportation related cost-share programs.

This report supports Council's Strategic Plan 2022-2026 Strategy #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.4 Work with all levels of government for grant and funding opportunities.

This report supports Council's Strategic Plan 2022-2026 Strategy #2 Strategic and Sustainable Community Growth:

Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous City.

2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.

Analysis

TransLink Cost-Share Programs

TransLink provides cost-share funding to municipalities for multi-modal infrastructure projects via the following suite of programs:

- Major Road Network and Bike (MRNB) Upgrade Program: Allocated funding for capital improvements to roads that comprise the Major Road Network (MRN) and the construction of bicycle facilities both on and off the MRN.
- Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program: Allocated and competitive funding for the construction of bicycle facilities.
- Bicycle Infrastructure Capital Cost-Sharing (BICCS) Recovery Program: Competitive funding for the construction of bicycle facilities that can be completed within one year.
- Walking Infrastructure to Transit (WITT) Program: Allocated and competitive funding for pedestrian facility upgrades within walking distance of frequent stops, stations, and exchange to promote the seamless integration of walking and cycling with transit.
- Bus Speed and Reliability (BSR) Program: Competitive funding for feasibility studies and capital projects that support improved bus speed reliability.

The call for applications related to the above noted programs commenced on September 16, 2024, with a deadline before October 31, 2024. Staff prepared the applications and submitted them to TransLink by the deadline.

The projects for cost-sharing considerations are described below.

Projects for the 2025 TransLink Cost-Share Programs

The following projects have been submitted to TransLink for consideration in the 2025 infrastructure cost-share funding programs. Collectively, these projects will fully utilize TransLink's funding allocated for the City of Richmond, which is estimated at approximately \$3.9 million for 2025.

Major Road Network and Bike (MRNB) Upgrade Program (allocated)

TransLink's estimated 2025 allocation for Richmond is \$2,312,000 for the MRNB Program. The following projects have been submitted for consideration:

- *(Project #1) Garden City Road and Alderbridge Way Intersection Safety Improvements:* The removal of the northwest and southwest channelized right-turns at this intersection were approved by Council as part of the 2022 Capital Budget (2022 Arterial Roadway Improvement Program). The additional removal/modification of the southeast channelized right-turn was approved by Council as part of the 2024 Capital Budget (2024 Arterial Roadway Improvement Program). This is the second year of TransLink cost-share funding for this project. An amount of \$828,500 was received in 2024 from TransLink.
- *(Project #2) Granville Avenue and Cooney Road Intersection Safety Improvements:* The removal of the northwest channelized right-turn at this intersection and the associated cycling and pedestrian enhancements were approved by Council as part of the 2021 Capital Budget (2021 Arterial Roadway Improvement Program).
- *(Project #3) Cambie Road and No. 4 Road Intersection Upgrade:* This intersection is ranked #13 of the City's Top 20 Collision Prone Intersections report. Upgrades include increasing left-turn capacity along with pedestrian and cycling facility upgrades. This project was approved by Council as part of the 2021 Capital Budget (2021 Top 20 Collision Prone Intersections – Implementation of Medium/Long-Term Improvements).
- *(Project #4) Cambie Road and Brown Road Intersection Upgrade:* This intersection falls within the Sexsmith/Brown Road bike route which is currently in the design phase. Upgrades will include increasing pedestrian refuge areas, adding a full signal to help protect cycling and improve traffic flow from Brown Road. This project is included in the 2025 Arterial Roadway Improvement Program to be considered as part of the 2025 budget process.

Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program (allocated)

TransLink's 2025 estimated allocation for Richmond is \$1,190,000 for the BICCS Program.

The following projects have been submitted for consideration for the allocated component:

- *(Project #2) Granville Avenue and Cooney Road Intersection Safety Improvements:* As described above for the MRNB Program.

- (Project #4) Cambie Road and Brown Road Intersection Upgrade: As described above for the MRNB Program.
- (Project #5) Granville Avenue and Railway Avenue Intersection Safety Improvements: The removal of the northwest and northeast channelized right-turns at this intersection were approved by Council as part of the 2023 Capital Budget (2023 Arterial Roadway Improvement Program).
- (Project #6) Great Canadian Way Cycling Protection (Bridgeport Road to River Road): This project includes physical protection enhancements of painted bike lanes on Great Canadian Way from Bridgeport Road to River Road. Where feasible, protection will be established along Great Canadian Way to improve safety and comfort for cyclists and other road users. This project was approved by Council as part of the 2024 Capital Budget (2024 Active Transportation Program).
- (Project #7) Gilbert Road Off-Street Cycling Facility (Granville Avenue to Elmbridge Way): This project includes provision of a new protected cycling facility along Gilbert Road. The project will connect to cycling facilities on Granville Avenue and the existing bike lane on Gilbert Road north of Elmbridge Way. The City was awarded \$2,280,000 in funding from the Government of Canada as part of the Active Transportation Fund in 2023, and \$622,500 from TransLink in 2024. This project was approved by Council as part of the 2024 Capital Budget (2024 Gilbert Road Off-road Cycling Facility, Granville Avenue to Elmbridge Way).

Walking Infrastructure to Transit (WITT) Program (allocated)

TransLink's 2025 estimated allocation for Richmond is \$398,000 for the WITT Program. The following projects have been submitted for consideration for the allocated component:

- (Project #2) Granville Avenue and Cooney Road Intersection Safety Improvements: As described above for the MRNB Program.
- (Project #5) Granville Avenue and Railway Avenue Intersection Safety Improvements: As described above for the MRNB Program.
- (Project #8) Westminster Highway and Highway 91 Bus Stop Access Pathway: This project includes provision of a more direct, accessible pathway for pedestrians walking to and from Westminster Highway and the neighbourhood west of the Highway 91 overpass. The existing pathway requires pedestrians to walk to the intersection of Westminster Highway and Westminster Highway which prohibits a convenient connection to transit services. The project is included in the 2025 Neighbourhood Walkway Program to be considered as part of the 2025 budget process.

Bus Speed and Reliability (BSR) Program (competitive)

TransLink will reimburse a municipality 100 per cent of the eligible costs for a BSR project. Funding for the BSR Program is available on a competitive basis. The following projects have been submitted for consideration:

- (Project #9) Garden City Road and Alderbridge Way Bus Priority Measures: Intersection has been identified for study of bus priority measures.

This project was approved by Council as part of the 2022 and 2024 Capital Budgets (2022 and 2024 Arterial Roadway Improvement Program).

- (Project #10) Great Canadian Way and Bridgeport Road Bus Only Left Turn Lane: Intersection has been identified for a Bus Only Left Turn Lane project. This project was approved by Council as part of the 2023 Capital Budget (2023 TransLink Bus Speed & Reliability Projects).

The estimated value of the BSR submission is \$1,573,000. Should the BSR submissions be successful, the budget of the capital projects will be increased to reflect the external contributions and will be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly.

Requested Funding and Estimated Project Costs

The total requested funding for the 2025 submissions to TransLink’s cost-share programs excluding BSR projects is \$3.9 million, which will support projects with a total estimated eligible project cost of \$13,072,749 (Table 1). Should TransLink support the City’s submissions for Bus Speed and Reliability (BSR) projects, the total funding would be \$5,472,765.

Table 1: Projects Submitted to 2025 TransLink Cost-Share Programs

Project No.	Project	2025 ⁽³⁾ Potential TransLink Funding	Estimated Project Costs	Total % of Project Costs
1	Garden City Road and Alderbridge Way – Intersection Safety Improvements	\$821,500 MRNB (\$828,500 received in 2024)	\$2,175,000 ⁽¹⁾	67%
2	Granville Avenue and Cooney Road – Intersection Safety Improvements	\$462,000 MRNB \$190,500 BICCS \$121,500 WITT \$150,000	\$940,500	49%
3	Cambie Road and No.4 Road Intersection Upgrade	\$1,200,000 MRNB	\$2,776,409	43%
4	Cambie Road and Brown Road Intersection Upgrade	\$600,000 MRNB \$300,000 BICCS \$300,000	\$1,400,000	43%
5	Granville Avenue and Railway Avenue – Intersection Safety Improvements	\$530,765 BICCS \$382,765 WITT \$148,000	\$1,080,840 ⁽²⁾	49%
6	Great Canadian Way Cycling Protection (Bridgeport Road to River Road)	\$175,000 BICCS	\$350,000	50%
7	Gilbert Road (Granville Avenue to Elmbridge Way) Off-Street Cycling Facility	\$210,500 BICCS (\$622,500 received in 2024 with additional \$2,280,000 awarded from Federal Grant)	\$4,150,000	75% (20% TransLink, 55% Federal)
8	Westminster Highway and Highway 91 Bus Stop Access Pathway	\$100,000 WITT	\$200,000	50%
	Sub Total excluding BSR projects⁽⁴⁾	\$3,899,765	\$13,072,749	

Table 1 Continued: Projects Submitted to 2025 TransLink Cost-Share Programs

	BSR Projects	2025 ⁽³⁾ Potential TransLink Funding	Estimated Project Costs	Total % of Project Costs
9	Garden City Road and Alderbridge Way – Bus Priority Measures	\$725,000 <i>BSR</i>	\$725,000 ⁽¹⁾	100%
10	Great Canadian Way at Bridgeport Road – Bus Only Left Turn lane	\$848,000 <i>BSR</i>	\$848,000 ⁽²⁾	100%
	Total 2025 Estimated Funding	\$5,472,765 <i>MRNB \$2,312,000</i> <i>BICCS \$1,190,000</i> <i>WITT \$398,000</i> <i>BSR \$1,573,000</i>	\$14,645,749	

- (1) Estimated Project Costs exceed approved project budget based on current cost estimates and/or potential additional scope. Should the grant application for this project be successful, the approved project budget will be increased accordingly.
- (2) Estimated Project Costs exceed approved project budget based on current cost estimates. Should the grant application for this project be successful, the approved project budget will be increased accordingly.
- (3) The amounts shown represent the anticipated funding contribution to be requested from TransLink based on the City's cost estimate for the project. The actual amount invoiced to TransLink follows project completion and is based on incurred costs.
- (4) BSR project funding is not allocated and is subject to a competitive process.

Should the submissions be successful, the City would enter into funding agreements with TransLink. Staff recommend that the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to execute the agreements.

Financial Impact

The City’s portion of the cost for the Westminster Highway and Highway 91 Bus Stop Access Pathway and Cambie Road and Brown Road Intersection Upgrade are included in capital submissions in the 2025 Neighbourhood Walkway Program and 2025 Arterial Roadway Improvement Program, respectively, which will be submitted to Council for consideration during the 2025 budget process.

The City's portion of the costs of the remaining project applications will be funded from previously approved capital projects.

Should the grant applications be successful, the budget of the capital projects will be increased to reflect the external contributions and will be included in the Consolidated 5 Year Financial Plan (2025-2029) accordingly. Upon project completion, any excess funding would be returned to the original funding sources.

Conclusion

A number of road, pedestrian and bicycle route improvement projects have been submitted to TransLink’s various cost-sharing programs for 2025. Maximizing external funding supports the implementation of local transportation improvements.

November 18, 2024

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Should these projects be approved by TransLink and Council, new infrastructure that provides safety and accessibility enhancements to those using sustainable travel modes will be achieved.



Sonali Hingorani, P.Eng.
Manager, Transportation Planning and New Mobility
(604-276-4049)



Nathan Andrews
Transportation Planner
(604-276-4035)

SH:ck



To: Public Works and Transportation Committee **Date:** November 7, 2024
From: Suzanne Bycraft **File:** 02-0780-01/2024-Vol
 Director, Public Works Operations 01
Re: 8205Q - Award of Contract for Five Electric Ice Resurfacers

Staff Recommendation

1. That Contract 8205Q, for the supply and delivery of five electric ice resurfacers be awarded to Engo Equipment Sales Ltd. for a total cost of \$971,000 excluding taxes as described in the staff report entitled “8205Q – Award of Contract for Five Electric Ice Resurfacers” dated November 7, 2024, from the Director, Public Works Operations;
2. That staff be authorized to issue change orders as required up to an additional \$50,000 for contingency, for a maximum total value of \$1,021,000, excluding taxes; and
3. That the Chief Administrative Officer and the General Manager, Finance and Corporate Services be authorized to execute the contracts and all related documentation with Engo Equipment Sales Ltd.

Suzanne Bycraft
 Director, Public Works Operations
 (604-233-3338)

REPORT CONCURRENCE		
ROUTED TO: Finance Department Recreation and Sport	CONCURRENCE <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

This report seeks approval to award Contract 8205Q for five electric ice resurfacers in the City's fleet. These units support various skating and ice hockey programs for the community. The existing fleet comprises 2012 Olympia Ice Bear fully electric units 1458, 1602, 1603, 1604 and 1605 which are being replaced due to equipment age, accumulated operating hours, high repair cost and deteriorating batteries.

To engage qualified vendors, a procurement process was undertaken.

This report supports Council Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.

5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.

This report supports Council's Strategic Plan 2022-2026 Focus Area #6 A Vibrant, Resilient and Active Community:

Vibrant, resilient and active communities supported by a wide variety of opportunities to get involved, build relationships and access resources.

6.1 Advance a variety of program, services, and community amenities to support diverse needs and interests and activate the community.

Background

The City operates five ice resurfacers to ensure optimal ice quality at its two arena facilities. One ice resurfacer is stationed at Minoru Arenas, servicing two ice sheets, while three machines are dedicated to the Richmond Ice Centre for maintaining six ice sheets. The Richmond Ice Centre provides year-round ice, whereas Minoru Arenas provides ice for nine months of the year. Both facilities are open seven days a week from 6:00 a.m. to 12:00 a.m., during which time the ice resurfacers perform an average of 20 to 27 ice cleans daily. A fifth ice resurfacer is maintained to ensure uninterrupted service at the ice rinks as a backup in the event any of the four primary machines require repairs or scheduled maintenance.

The City began introducing zero-emission electric ice resurfacers in its fleet in approximately 2007. Electric ice resurfacers emit zero greenhouse gas (GHG) emissions whereas a comparable fossil fuel based unit emits approximately 13.59 tonnes annually. Based on five units, the annual emissions reduction is approximately 68 tonnes. Additionally, the use of electric ice resurfacers has contributed to improved air quality for both patrons and staff.

Analysis

Procurement Process

The City posted a Request for Quotation (RFQ) 8205Q to BC Bid on September 29, 2023. Although the RFQ was initially issued was for the purchase of two electric ice resurfacers, it included the option to purchase additional units. This option was exercised as the remaining units began to exhibit additional maintenance failures and challenges while the review process was underway.

Three quotations were received by the stated closing date of November 1, 2023. Due to the duration of the evaluation process, updated pricing was obtained from the two lowest bidders for 2025 units.

Table 1 – Public Tendering

Vendor	Unit Tendered	Base Cost Plus Options for 1 Unit	Total Cost for 5 Units
Engo Equipment Sales Inc.	2025 Engo Ice Wolf Classic	\$ 194,200	\$971,000
Kendrick Equipment Ltd.	2025 Zamboni 650ACLI	\$ 197,720	\$988,600
Vimar Equipment Ltd.	2024 Olympia Millennium E with Lithium Batteries	\$ 233,251	\$ 1,166,255

Review and Evaluation

Staff evaluated each bidder's quotation and alignment with City stated specifications. While all three bidders met the required specifications, Vimar was not considered further in the RFQ process due to their higher cost. Staff then assessed Engo and Zamboni's experience, capacity, mark-up on parts, customer references, sustainability, and how the proposed models would align with the operational needs of the facilities. After meeting these criteria, staff conducted demonstrations of the proposed units from Engo and Zamboni, and performed reference checks. With positive results from both the demonstrations and reference checks, staff proceeded to the award recommendation in the RFQ process.

Award Recommendation

As a result of the RFQ process, staff concluded that the submission by Engo met the City's stated specifications described in the RFQ and represented overall best value to the City. The submission received from Engo reflected the lowest priced quotation received and offers fast charging capabilities, a quick change conditioner blade replacement, an automatic water shut off system, a large flood water tank option, and backup sensors.

The submission by Kendrick also met specifications, however they were not the lowest bidder.

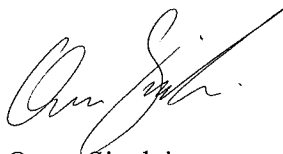
Upon the arrival of the new machines, the City will adhere to the established asset disposal process which includes sending the equipment to public auction where all revenues received will be applied to the Fleet Reserve to ensure sustainable funding for future vehicle and equipment replacements.

Financial Impact

The total cost to award Contract 8205Q to Engo Equipment Sales Ltd. is estimated at \$1,021,000 including a \$50,000 contingency and excluding taxes. Pricing for the recommended units will be held until December 31, 2024. Funding for these units has been approved as part of the 2024 Vehicle and Equipment Reserve Purchase (PW and Corporate Fleet) Capital Budget project CV00031. The total annual rate increase for the five units is \$30,530 and is included in the 2025 Operating Budget. Having the same style and make of units is expected to offer economies of scale for equipment repair and parts inventory stocking.

Conclusion

Staff recommend that Contract 8205Q - supply and delivery of five electric ice resurfacers with ice levelling systems, be awarded to Engo Equipment Sales Ltd, for \$1,021,000, exclusive of taxes as it represents best value for the City.



Owen Sinclair
Manager, Fleet Operations
(604-233-3301)